



**Course on Functional Neurovascular Anatomy
World Federation of Interventional and Therapeutic Neuroradiology
Chicago, May 23-27, 2022**

Faculty:

Sameer Ansari, Chicago, USA- local organizer

Götz Benndorf, Copenhagen, Denmark

Serge Bracard, Nancy, France

Michele Johnson, New Haven, USA

Masaki Komiyama, Kyoto, Japan

Seon-Kyu Lee, New York, USA

Philippe Mercier, Angers, France

Georges Rodesch, Paris, France

Maksim Shapiro, New York, USA

Michael Söderman, Stockholm, Sweden – course director

Michihiro Tanaka, Tokyo, Japan

Monday May 23rd

08.00-08.30 Welcome and Introduction, Presentation of students and speakers
S. Ansari / M. Soderman

08.30-09.15 Functional vascular anatomy of the musculocutaneous arteries of
the head *S. Ansari*

9.15-10.00 Cranio-cervical junction and pharyngo-occipital system . *SK Lee*

10.00-10.30 Coffee break

10.30-11.00 Surgical 3D vascular anatomy of the cranio-cervical junction
Ph.Mercier

11.00-11.45 Cranial nerve arterial supply . *M. Tanaka*

11.45-12.30 Embryology and Anatomy of the Internal Carotid Artery including
circle of Willis *M.Komiyama*

12.30-13.30 Lunch

Tuesday May 24th

08.00-08.45 Vascular functional anatomy of the nasal fossa and maxillary area
M. Johnson

08.45-09.30 Cavernous sinus - arterial aspects *G. Benndorf*

09.30-10.00 Surgical 3D Anatomy of the cavernous sinus *Ph. Mercier*

10.00-10.30 Coffee break

10.30-11.00 Ophthalmic artery: embryology, anatomy, arterial variations
M. Komiyama

11.00-11.45 Surgical 3D anatomy of the orbit *Ph. Mercier*

11.45-12.30 Basilar Tip variations and perforating arteries *M. Komiyama*

12.30-13.30 Lunch

Wednesday May 25th

08.00-08.45 Brain stem arterial vascularization *S.Bracard*

08.45-09.30 Arterial vascularization of the cerebellum *G. Rodesch*

09.30-10.00 Surgical 3D anatomy of the basilar artery and perforators
Ph.Mercier

10.00-10.30 Coffee Break

10.30-11.15 Functional anatomy of the intracranial venous system *S.Bracard*

11.15-11.45 The cavernous sinus - venous aspects *G.Benndorf*

11.45-12.30 Veins of the posterior fossa *M.Shapiro*

12.30-13.30 Lunch

Thursday May 26th

08.00-08.45 Surgical 3D vascular anatomy of the cerebral venous system
Ph.Mercier

8.45-9.30 Anterior Choroidal Artery and Posterior Cerebral Artery:
Embryology, anatomy, arterial variations *M. Tanaka*

9.30-10.15 MCA, ACA, Artery of Heubner *SK Lee*

10.15-10.45 Coffee Break

10.45-11.00 The sub callosal artery *M.Soderman*

11.00-11.30 Surgical 3D vascular anatomy of the perforators (ACA, MCA,
Heubner...) *Ph.Mercier*

11.30-12.00 Cerebral arterial territories: from pipes to genes *G.Rodesch*

12.00-12.30 Collateral vessels to the brain: from duro-pial to pio-pial
M. Soderman

12.30-13.30 Lunch

Friday May 27th

8.00-8.30 The notochord: key to further somatic dispositions *G.Rodesch*

8.30-9.15 Arterial anatomy of the spine and spinal cord *M. Tanaka*

9.15-9.45 Venous anatomy of the spine and spinal cord *M. Shapiro*

9.45-10.15 The G lymphatic system *S.Bracard*

10.15-10.45 Coffee break

10.45-11.15 An anaglyph journey through the cerebral venous system *M. Shapiro*

11.15-12.30 Two workshops on the spine and spinal cord vascular anatomy

12.30-13.30 Lunch

13.30-15.00 Test

15.00-15.30 Course evaluation - End of course

Topics for workshops

There will be 15 workshops for Monday-Thursday and two workshops Friday
The five groups of 12 students will circulate so there will be three sets of five workshops for Monday-Thursday and 10 spinal cord workshops Friday (each group will attend two workshops).

Workshops Monday-Thursday:

13.30-14.15

14.15-15.00

15.00-15.45

15.45-16.30

Set 1

The craniocervical junction

ECA-ICA Anastomoses

Cranial nerve supply

ICA-cavernous sinus arterial aspects

Vascularization of the inner ear

Set 2

The orbit

Arterial Perforators

Basilar artery variations

MCA variations - Heubner's artery

PCA and AChorA variations

Set 3

Arterial supply to the maxillary-facial region

Posterior fossa venous system

Deep venous system

Cortical venous system

Cavernous sinus venous aspects

Friday: Workshops covering the spine and spinal cord